FIG. 1

FIG. 2a
RZ PULSES

FIG. 2b
DATA

0 0 0 1 0 1 0 0 1 0 1 0 1 1 0 1

FIG. 2c
ELECTRICAL SIGNAL
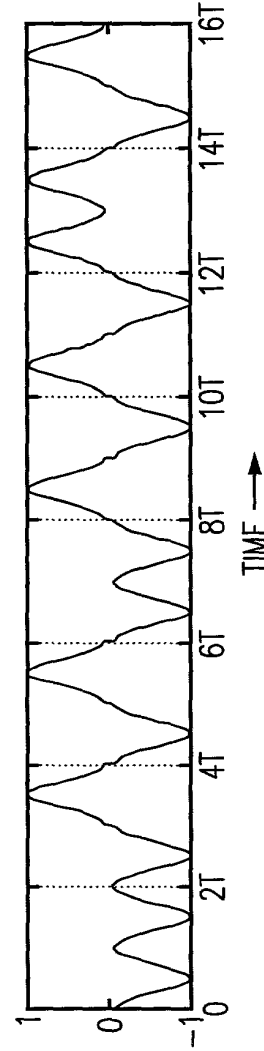
FIG. 2d
PSK E-FIELD

T = BIT PERIOD

FIG. 3

140 WDM ....

120 WDM ....

130 DISPERSION-
MANAGED LINK

161 TUNABLE
D-COMP

162 PMD
COMPENSATOR

150 RECEIVER

300

105 PSK
MODULATOR

103 PULSE
CARVER

101 DFB
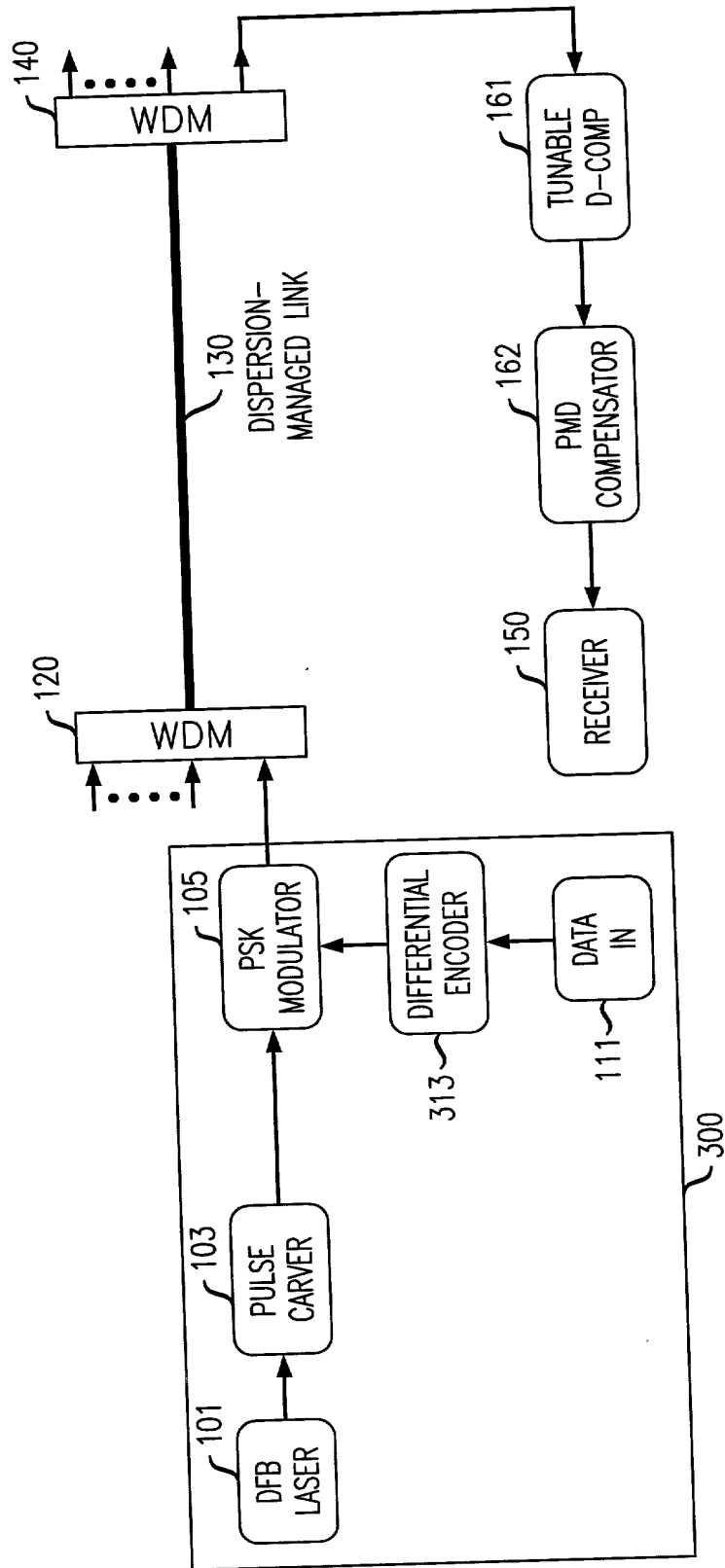LASER
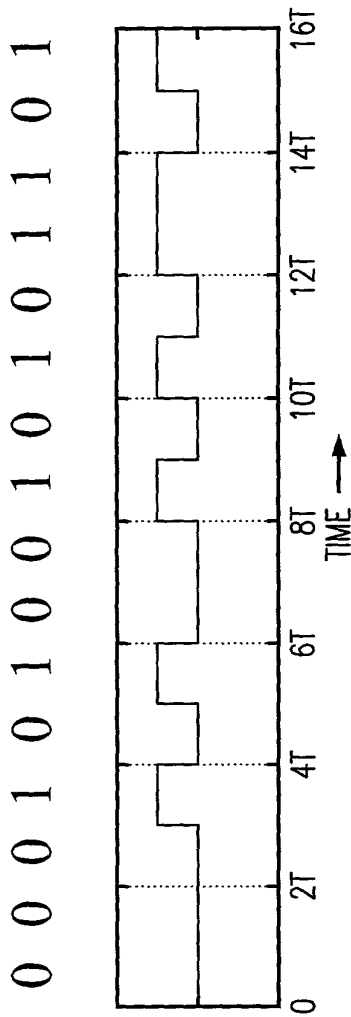
313 DIFFERENTIAL
ENCODER

111 DATA
IN

FIG. 4a
DATA

FIG. 4b
ELECTRICAL SIGNAL
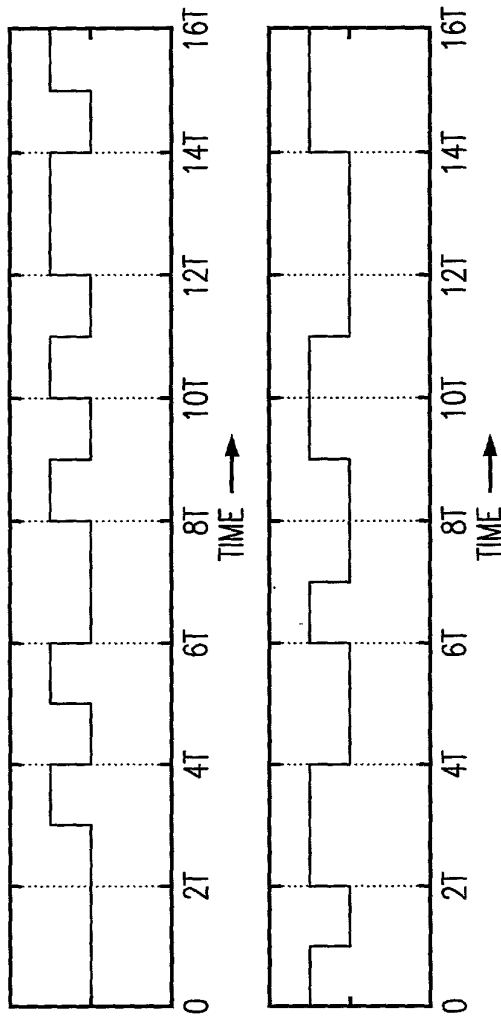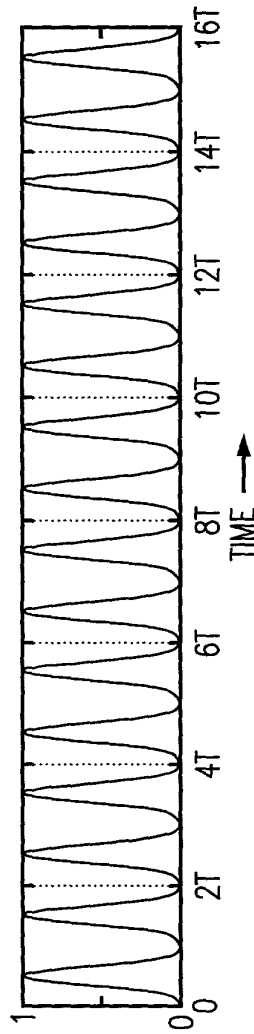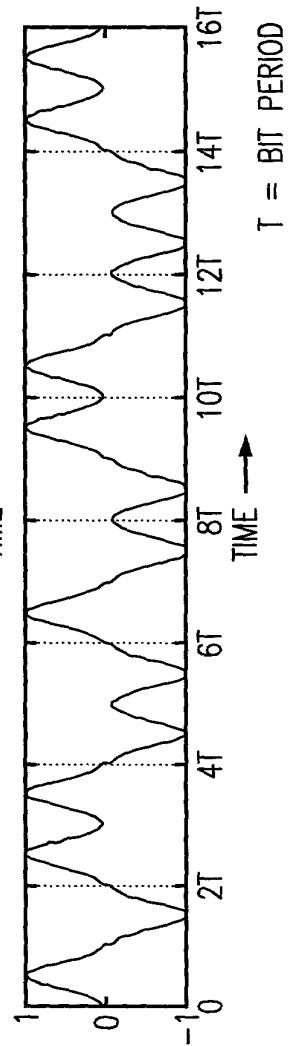
FIG. 4c
ELECTRICAL SIGNAL
AFTER DPSK ENCODER

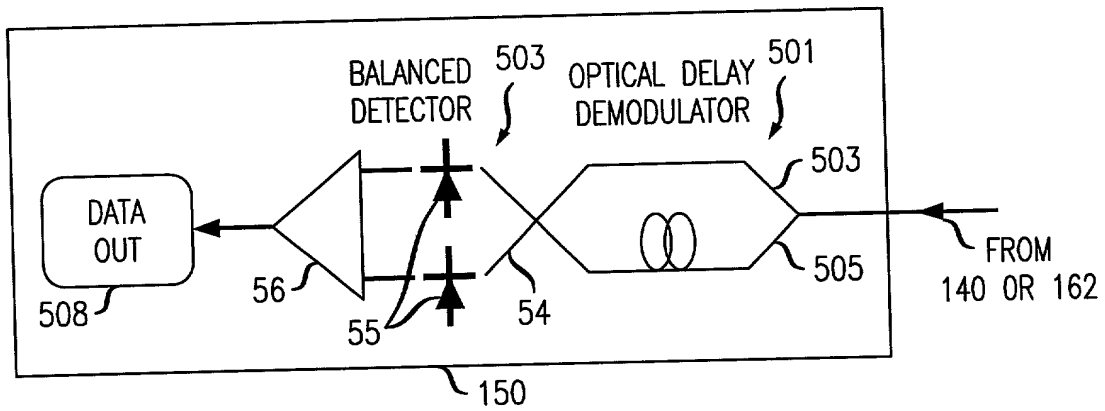**FIG. 4d**
RZ PULSES

FIG. 4e
DPSK E-FIELD

0 0 0 1 0 1 0 0 1 0 1 0 1 1 0 1

T = BIT PERIOD

FIG. 5

BALANCED 503   OPTICAL DELAY 501
DETECTOR   DEMODULATOR

503

DATA
OUT

505

FROM
140 OR 162

508

56

55   54

150

DISPERSION MAP

d_1

d_2

FIG. 6a

ACCUMULATED DISPERSION

SPAN LENGTH

610-3

610-2

610-1

ℓ_2

ℓ_1

DISTANCE
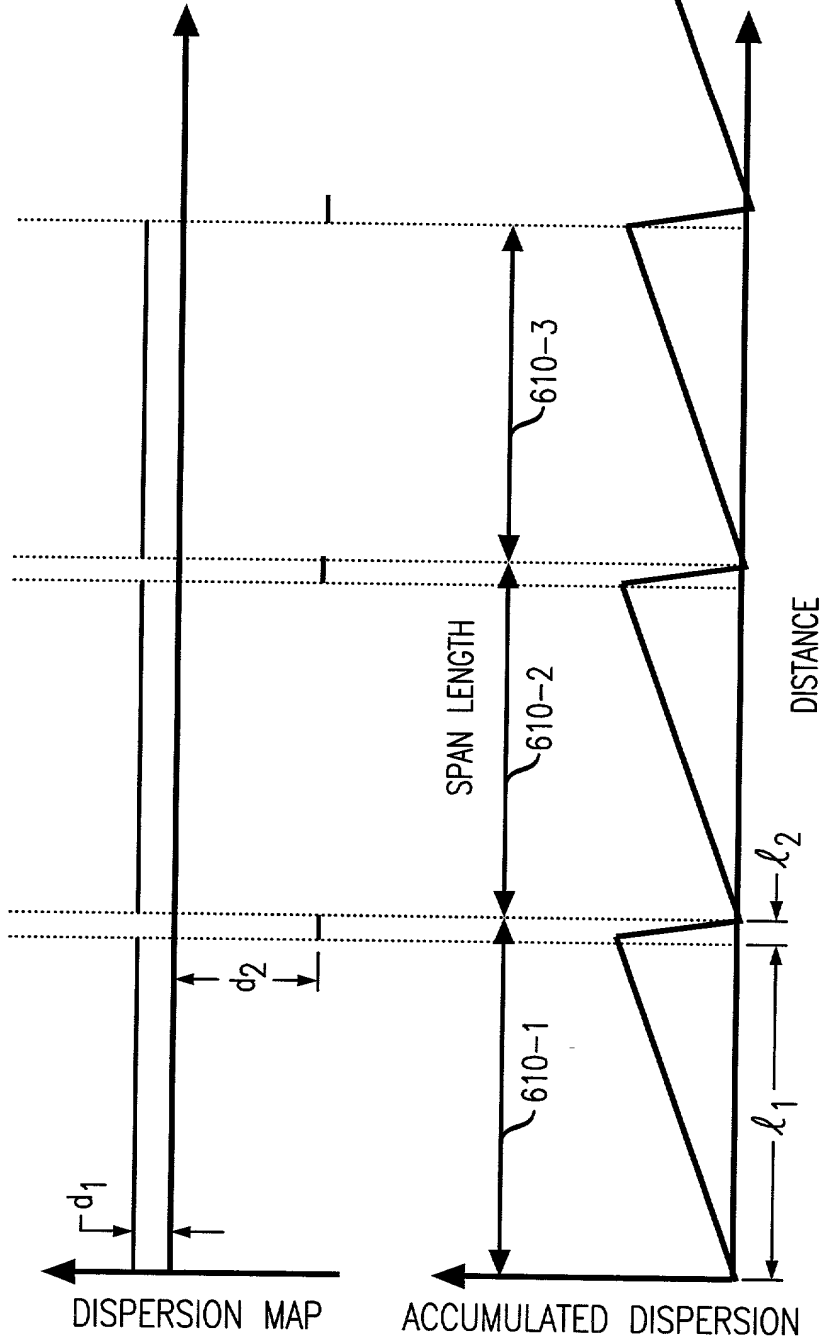
FIG. 6b

FIG. 7

DISPERSION MANAGEMENT IN A DMS SYSTEM

ACCUMULATED LINEAR DISPERSION ⌐ 702

EFFECTIVE NET DISPERSION WITH DISPERSION MANAGED SOLITONS ⌐ 701
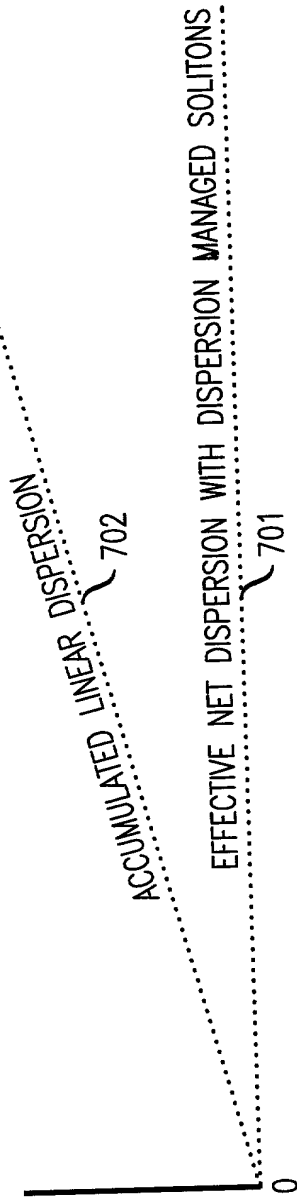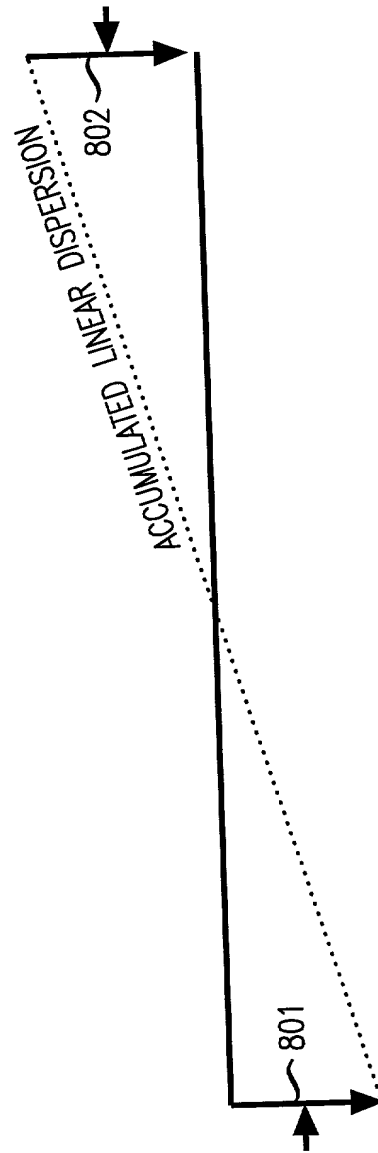
FIG. 8

DISPERSION MANAGEMENT IN A RZ (NON-DMS) SYSTEM

POST-COMPENSATION

802

ACCUMULATED LINEAR DISPERSION

801

PRE-COMPENSATION